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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/706,127

Applicant(s)

WILKINSON, JAMES HEDLEY

Examiner

Ian N. Moore

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 March 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-26 and 28 is/are rejected.
- 7) ☒ Claim(s) 27,29 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 November 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 11-03-00.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. Figure 1,2 and 3 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

2. Applicant is reminded of the proper language and format for an abstract of the disclosure. The abstract is more than one paragraph with legal phraseology "comprises...comprise...comprising" in lines 3-5 and 7.

The abstract should be in narrative form and generally limited to **a single paragraph** on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. **The form and legal phraseology often used in patent claims**, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

3. The abstract of the disclosure is objected to because it contains **Figure numbers** in lines 5,7,15,17 and 21. Correction is required. See MPEP § 608.01(b).

Claim Objections

4. Claims 1,2,4,6, 9-11, 12,13,19, 20,25,26,27, and 28 are objected to because of the following informalities: appropriate corrections are required.

Claims 1,2,4,6,12,13,20,23, 25,26,27, and 28 are objected to because of the following informalities: **"the or each..."** For clarity, it is suggested to use either "the" or "each".

Claim 2 discloses acronym "SDTI" in line 2. It is suggested to describe the acronym when reciting for the first time in claim.

Claims 4,7,8,10,22,23,27 and 29 are objected to because of the following informalities: **"the said"**. For clarity, it is suggested to use either "the" or "said".

Claims 9-11 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

Claim 9 recites **"a file for storage in a computer system, the file comprising a concatenation of one ore more Content packets as defined in claim 2..."**

"A file for storage in a computer system" of claim 9 neither limits nor relates to what is being claimed in claim 2, since claim 2 only a signal format. There are no "Content packets" in claim 2 either.

Claims 10-11 and 19 are also objected since they also include the limitation "a file".

Claim 23 recites, "having a **store** for storing files" in line 25. For clarity, it is suggested to change "a store" to "a storage" or equivalent.

Claims 24,27 and 29 are also objected for the same reason as claim 23 above.

Claim 27 is missing a period "." at line 25.

Claim 28 recites, "a,Label" in line 30 (page 22) and line 1 (page 23). It is suggested to remove a comma ",".

Claim Rejections - 35 USC § 101

5. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. Claims 1 and 3 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter on the basis of nonfunctional descriptive material.

Claim 1 is not tangible embodied on a computer readable medium. Claim 1 recites, "**a signal format comprising a content package...**" in line 1. A content package is not tangible embodied anywhere. In addition, Data structures (a content package), not claimed as embodied in computer-readable media, are descriptive material per se and are not statutory because they are not capable of causing functional change in the computer. Claims to computer-related inventions that are clearly nonstatutory fall into the same general categories as nonstatutory claims in other arts, namely natural phenomena such as magnetism, and abstract ideas or laws of nature, which constitute "descriptive material." Abstract ideas, *Warmerdam*, 33 F.3d at 1360, 31 USPQ2d at 1759, or the mere manipulation of abstract ideas, *Schrader*, 22 F.3d at 292-93, 30 USPQ2d at 1457-58, are not patentable.

Descriptive material can be characterized as either “functional descriptive material” or “nonfunctional descriptive material.” In this context, “functional descriptive material” consists of data structures and computer programs which impart functionality when employed as a computer component. (The definition of “data structure” is “a physical or logical relationship among data elements, designed to support specific data manipulation functions.” The New IEEE Standard Dictionary of Electrical and Electronics Terms 308 (5th ed. 1993).) “

Nonfunctional descriptive material” includes but is not limited to music, literary works and a compilation or mere arrangement of data. Both types of “descriptive material” are nonstatutory when claimed as descriptive material per se. Warmerdam, 33 F.3d at 1360, 31 USPQ2d at 1759. When functional descriptive material is recorded on some computer-readable medium it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized. Compare *In re Lowry*, 32 F.3d 1579, 1583-84, 32 USPQ2d 1031, 1035 (Fed. Cir.1994) (claim to data structure stored on a computer readable medium that increases computer efficiency held statutory) and Warmerdam, 33 F.3d at 1360-61, 31 USPQ2d at 1759 (claim to computer having a specific data structure stored in memory held statutory product-by-process claim) with Warmerdam, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure per se held nonstatutory). When nonfunctional descriptive material is recorded on some computer-readable medium, it is not statutory since no requisite functionality is present to satisfy the practical application requirement.

Merely claiming nonfunctional descriptive material stored in a computer-readable medium does not make it statutory. Such a result would exalt form over substance. In re Sarkar, 588 F.2d 1330, 1333, 200 USPQ 132, 137 (CCPA 1978) ("[E]ach invention must be evaluated as claimed; yet semantogenic considerations preclude a determination based solely on words appearing in the claims. In the final analysis under 101, the claimed invention, as a whole, must be evaluated for what it is.") (quoted with approval in Abele, 684 F.2d at 907, 214 USPQ at 687). See also In re Johnson, 589 F.2d 1070, 1077, 200 USPQ 199, 206 (CCPA 1978) ("form of the claim is often an exercise in drafting").

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. Claims 1, 12 and 15 are rejected under 35 U.S.C. 102(e) as being anticipated by Kuroda (US 6,501,904).

Regarding Claim 1, Kuroda discloses a signal format (see FIG. 6)

comprising a Content Package (see FIG. 6, structure of recorded/storage medium)

having at least a System Item (see FIG. 6, Video data region) and one or more of a

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Picture Item, an Audio Item and an Auxiliary Item (see FIG. 6, Video Auxiliary data region; see col. 7, lines 14-51), wherein the or each of the System, Picture, Audio and Auxiliary Items (see FIG. 7; or see FIG. 2) comprises:

- a Label (see FIG. 2, ID region where a combined region of packet first ID (DID) and packet second ID (SDID)) having a predetermined number of bytes (see FIG. 2, ID words/bytes allotted for the region), and including at least one byte identifying the Item (see FIG. 2, 1 word/byte); see col. 6, lines 9-22;

- a word count (see FIG. 2, Data count word, DC) indicating the number of bytes of data of the Item (see col. 6, lines 23); and

- the data of the Item (see FIG. 2, User Data word, UDW; see col. 6, lines 24-30).

Regarding Claim 12, a method claim which that substantially discloses all the limitations of the respective system claim 1, where the or each of the System, Picture, Audio and Auxiliary Items being formed by concatenating (see FIG. 6, Video data and Auxiliary Data regions are concatenated within a structure of recorded/storage medium; see col. 7, lines 14-51) and the label have at least one byte (see FIG. 2, ID (i.e. DID and SDID) has one word/byte). Therefore, it is subjected to the same rejection.

Regarding Claim 15, Kuroda discloses a file for storage in a computer system (see FIG. 1, recording means 3 and tape 9), comprising concatenating one or more Content Packages as defined in claim 12 (see FIG. 6, Video data and

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Auxiliary Data regions are concatenated within a structure of recorded/storage medium; see col. 6, lines 1-65; see col. 7, lines 14-51).

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 2,8-11,13,14,16-21, and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fujiwara (US 6,512,794) in view of Eneroth (US 6,631,116).

Regarding Claim 2, Fujiwara discloses a signal format (see FIG. 4 and 5) for use in a system which transfers data to and/or from an SDTI system (see FIG. 1, SDTI system; see col. 8, lines 12-20), the signal format comprising a SDTI Content Package (see FIG. 4 and 5) having at least a System Item (see FIG. 4, Active Vertical Banking period or Horizontal period) and one or more of a Picture Item, an Audio Item and an Auxiliary Item (see FIG. 4 Active video period, or see FIG. 5, Ancillary data; see col. 1, lines 35-56; see col. 2, lines 50 to col. 3, lines 12), wherein the or each of the System, Picture, Audio and Auxiliary Items (see FIG. 6) comprises:

a word count (see FIG. 6, Data count or code) indicating the number of bytes of data of the Item (see col. 3, lines 20-30; see col. 10, lines 1-34); and

the data of the Item (see FIG. 6, data; see col. 3, lines 20-60; see col. 10, lines 1-27);

each Item being modified in that a Label (see FIG. 2, ID region where a combined region of packet first ID (DID) and packet second ID (SDID)) having a predetermined number of bytes (see FIG. 6, ID words/bytes allotted for the region; see col. 10, lines 1-27) and identifying the item (see FIG. 2, ID region); see col. 1, lines 40-50; see col. 3, lines 20-30, and the removing Start Code of the Item (see FIG. 5, SAV, Start of active video) and the End Code of the Item (see FIG. 5, EAV, End of active video); see col. 9, lines 15-25; decode the data from the received payload by removing the start and end code).

Fujiwara does not explicitly disclose label replaces the start code. However, Eneroth teaches a Label (see FIG. 6, label E 13, see FIG. 10, LEQ codes; see col. 6, lines 5-25) having a predetermined number and identifying the Item (see FIG. 6 or 9, label or LEQ has predetermined number to identify the length of the cell) replaces the Start Code of the Item (see FIG. 6, label E field 11, or see FIG. 9, LEQ field 25; label or LEQ code is replaced/inserted at the beginning/start of the cell) and the End Code of the Item is removed (see col. 5, lines 1 to col. 6, lines 10; and thus when replacing label/codes (e.g. 0, 1, 00, 11; etc.) at the start of the payload which represent both start and end of the payload, there is no end code/flag require (i.e. removing both start and end code)). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to replace label/codes (e.g. 0, 1, 00, 11, etc.) at the start of the payload which represent both

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start and end of the payload, as taught by Eneroth in the system of Fujiwara, so that it would dynamically change the size of the cell during an ongoing connection thereby providing efficiency while the overhead cost is reduced; see Eneroth col. 1, line 20-67.

Regarding Claim 8, Fujiwara discloses wherein the said byte identifying the Item field of the label does not have a predetermined fixed format (see FIG. 6, ID field (i.e. DID and SDID) field changes according to the ID of the payload data, thus it does not have a predetermined fixed format). Eneroth discloses the label has a predetermined fixed format (see FIG. 6, label E 13, see FIG. 10, LEQ codes; see col. 6, lines 5-25). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a predetermined fixed format label/codes (e.g. 0, 1, 00, 11, etc.), as taught by Eneroth in the system of Fujiwara, for the same reason as stated above in claim 2.

Regarding Claim 9, Fujiwara discloses a file for storage in a computer system (see FIG. 1, record processing circuit 12 and recording medium 13; see col. 8, lines 15-40), the file comprising a concatenation of one or more Content Packages as defined in claim 2 (see FIG. 4-5 SDTI frame with concatenated video, vertical, horizontal, and ancillary data/period; see col. 1, lines 35-56; see col. 2, lines 50 to col. 3, lines 12). Eneroth also discloses the file comprising a concatenation of one or more Packages (see FIG. 34 and 37; concatenation of minicells; see col. 13, lines 55 to col. 14, lines 5; see col. 16, lines 14-29).

Regarding Claim 10, Fujiwara discloses a concatenation of a plurality of Content Packages, each Content Package including one video frame (see FIG. 4-5 SDTI frame with concatenated video frame; see col. 1, lines 35-56; see col. 2, lines 50 to col. 3, lines 12).

Regarding Claim 11, Fujiwara discloses the frames are compressed video frames (see col. 3, lines 34-60; compressed video frames).

Regarding Claim 13, a method claim which that substantially discloses all the limitations of the respective system claim 2, where the label have at least one byte (see FIG. 6, ID (i.e. DID and SDID) has one word/byte). Therefore, it is subjected to the same rejection.

Regarding Claim 14, a method claim which that substantially discloses all the limitations of the respective system claim 8. Therefore, it is subjected to the same rejection.

Regarding Claim 16, a method claim which that substantially discloses all the limitations of the respective system claim 9. Therefore, it is subjected to the same rejection.

Regarding Claim 17, a method claim which that substantially discloses all the limitations of the respective system claim 10. Therefore, it is subjected to the same rejection.

Regarding Claim 18, a method claim which that substantially discloses all the limitations of the respective system claim 11. Therefore, it is subjected to the same rejection.

Regarding Claim 19, Fujiwara discloses transferring video data within a computer network (see FIG. 1, receiver/transmitter for video data) comprising: forming a file (see FIG. 1, record processing circuit 12 and recording medium 13; see col. 8, lines 15-40) comprising a video data as defined in claim 17; and transferring the file (see FIG. 4-5 SDTI frame with video data/period; see col. 1, lines 35-56; see col. 2, lines 50 to col. 3, lines 12; and the video data/file is transferred; see col. 8, lines 15 to col. 60, lines 60; , lines 10, lines 60 to col. 11, lines 55).

Regarding Claim 20, Fujiwara discloses apparatus (see FIG. 1, SDTI receiver) for forming a content package (see FIG. 4 and 5) comprising:

an input (see FIG. 1, receiving circuit) for receiving an SDTI signal comprising an SDTI Content Package (see FIG. 1, SDTI system; see col. 8, lines 12-20) having at least a System Item (see FIG. 4, Active Vertical Banking period or Horizontal period) and one or more of a Picture Item, an Audio Item and an Auxiliary Item, (see FIG. 4 Active video period, or see FIG. 5, Ancillary data; see col. 1, lines 35-56; see col. 2, lines 50 to col. 3, lines 12) wherein the or each of the System, Picture, Audio and Auxiliary Items comprises a start code (see FIG. 5, SAV, Start of active video), a word count (see FIG. 6, Data count or code) indicating the number of bytes of data of the Item (see col. 3, lines 20-30; see col. 10, lines 1-34), the data of the Item (see FIG. 6, data; see col. 3, lines 20-60; see col. 10, lines 1-27) and an end code (see FIG. 5, EAV, End of active video); see col. 1, lines 40-50; see col. 3, lines 20-30; and

a format converter (see FIG. 1, SDTI decoder) for removing the start and end codes (see col. 9, lines 15-25; decode the data from the received payload by removing the start and end code); and

the Label (see FIG. 2, ID region where a combined region of packet first ID (DID) and packet second ID (SDID)) having a predetermined number of bytes (see FIG. 6, ID words/bytes allotted for the region; see col. 10, lines 1-27) and at least one byte identifying the Item (see FIG. 6, ID (i.e. DID and SDID) has one word/byte); see col. 1, lines 40-50; see col. 3, lines 20-30.

Fujiwara does not explicitly disclose inserting a Label in place of the start code. However, Eneroth teaches a format converter (see FIG. 17-18) removing the start and end codes (see col. 5, lines 1 to col. 6, lines 10; and thus when replacing label/codes (e.g. 0, 1, 00, 11, etc.) at the start of the payload which represent both start and end of the payload, there is no end code/flag require (i.e. removing both start and end code); and

inserting a Label (see FIG. 6, label E 13, see FIG. 10, LEQ codes; see col. 6, lines 5-25) in place of the start code (see FIG. 6, label E field 11, or see FIG. 9, LEQ field 25; label or LEQ code is replaced/inserted at the beginning/start of the cell)

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to insert label/codes (e.g. 0, 1, 00, 11, etc.) at the start of the payload which represent both start and end of the payload, as taught by Eneroth in the system of Fujiwara, so that it would dynamically change the size of

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the cell during an ongoing connection thereby providing efficiency while the overhead cost is reduced; see Eneroth col. 1, line 20-67.

Regarding Claim 21, Fujiwara discloses a signal source for producing the SDTI signal (see FIG. 1, receives SDTI signal at input, thus, it is clear that for an input to received the SDTI signal, there is a signal source that produces SDTI signal; see col. 8, lines 15-40).

Regarding Claim 26, a claim which that substantially discloses all the limitations of the respective apparatus claim 20. Therefore, it is subjected to the same rejection.

11. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kuroda (US 6,512,794) in view of Benayoun (US 6,499,061).

Regarding Claim 3, Kuroda discloses wherein the Label has a fixed number of bytes having preassigned values and at least one byte of value for identifying an item (see FIG. 2, ID fields has at least 1 word/byte of preassigned values for identifying the packet).

Kuroda does not explicitly disclose variable. However, Benayoun teaches wherein the Label has a variable of value (see col. 4, lines 50-65). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide variable value, as taught by Benayoun in the system of Kuroda, so that it would not introduce transmission overhead and does not require high-performance routers; see Benayoun col. 2, line 10-15.

12. Claim 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fujiwara in view of Eneroth, as described above in claim 2, and further in view of Kawamura (US 6,499,061).

Regarding Claim 4, Fujiwara does not explicitly disclose wherein the said data of the or each Item comprises one or more Element data blocks, the or each Item also having an Item header, preceding the element data, and indicating the number of element data blocks in the Item.

However, Kawamura teaches wherein the said data of the or each Item comprises one or more Element data blocks (see FIG. 3, packet #0-n), the or each Item also having an Item header (see FIG. 3, header), preceding the element data (see FIG. coded data), and indicating the number of element data blocks in the Item (see FIG. 3, length in the header field; see col. 1, lines 50-67; see col. 6, lines 27-60). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide length field of the packet, as taught by Fujiwara in the system of Kuroda, so that it would rapidly finding out access point of video data, thus making it possible to carry out quick search at a desired speed; see Kawamura col. 3, line 160 to col. 4, lines 15; and also by utilizing the length field in the packet header, it would be easier for one to determine where each packet starts or ends.

Regarding Claim 5, Kawamura discloses at least one word indicating the number of words in the Element, if greater than zero, (see FIG. 3, packet start code prefix);

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at least one word defining the type of element (see FIG. 3, ID) and
at least one word indicating the number of the Element (see FIG. 3, length), and
the data of the Element (see FIG. 3, code data); see col. 1, lines 50-67; see col.
6, lines 27-60.

Therefore, it would have been obvious to one having ordinary skill in the art at
the time the invention was made to provide length field of the packet, as taught by
Kawamura in the system of Fujiwara, for the same motivation as stated above in claim
4.

13. Claim 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over
Fujiwara in view of Eneroth, as described above in claim 2, and further in view of Jain
(US 6,567,980).

Regarding Claim 6, Fujiwara discloses the data of the System Item relating
to the or each of the Picture, Audio and Auxiliary Items in the Content Package as
discloses above in claim 2.

Fujiwara does not explicitly disclose metadata. However, Jain teaches he
data of the System Item includes metadata (see col. 3, lines 35-48; see col. 6, lines
40 to col. 8, lines 21; metadata). Therefore, it would have been obvious to one
having ordinary skill in the art at the time the invention was made to provide
metadata, as taught by Jain in the system of Fujiwara, so that it would perform real-
time, or non-real time media analysis, indexing and distribution of video, and would

also conserves valuable network bandwidth and dramatically reduces costs; see Jain col. 2, line 15-35.

Regarding Claim 7, Jain discloses wherein the said metadata includes link metadata which links metadata relating to an Element to the Element to which it relates (see col. 16, lines 65 to col. 17, lines 10; see col. 3, lines 35-48; see col. 6, lines 40 to col. 8, lines 21; metadata relates the elements). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide metadata links, as taught by Jain in the system of Fujiwara, for the same motivation as described above in claim 6.

14. Claim 22-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fujiwara in view of Eneroth as applied to claim 20 above, and further in view of Yamane (US 5,784,528).

Regarding Claim 22, the combined system of Fujiwara and Eneroth discloses receiving the SDTI signal and the said removing and inserting means within a format converter as described above in claim 20.

Neither Fujiwara nor Eneroth explicitly disclose a buffer for storing the signal. However, Yamane discloses a buffer (see FIG. 3, Video Buffer 2600, picture buffer 2700, and/or audio buffer 2800; or see FIG. 2, buffer 400,600,800) for storing the signal (see col. 12, lines 40-45; see col. 8, lines 5-15) and providing it to the said removing and inserting means (see FIG. 3. video decoder 3800, sub picture decoder

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3100, and/or audio decoder 3200; see col. 12, lines 40-67; or see FIG. 2, system encoder 900; see col. 10, lines 15-50).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a buffer to store the signal, as taught by Yamane, in the combined system of Fujiwara and Eneroth, so that it would efficiently controlled a large volume multiple digital bitstream and provide a data structure that seamlessly reproduced; see Yamane col. 1, line 40 to col. 3, lines 36.

Regarding Claim 23, Fujiwara discloses a computer system having a store for storing files (see FIG. 1, record processing circuit 12 and recording medium 13; see col. 8, lines 15-40), the said format converter (see FIG. 1, SDTI decoder) being an interface between the said signal source for producing the SDT1 signal (see FIG. 1, a signal source that connects to receiving circuit) and the computer system (see FIG. 1, record processing circuit).

Regarding Claim 24, Fujiwara discloses wherein the computer system comprises a network of file (see FIG. 1, recording medium 13) stores linked by a file transfer system (see FIG. 1, processing circuit 12; see col. 8, lines 15-40).

15. Claims 25 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamashita (US 5,696,557) in view of Tappan (US 006295296B1).

Regarding Claim 25, Yamashita discloses a method of forming a signal comprising the steps of:

receiving an signal (see FIG. 1, receiving SDDI signal) comprising a Content Package (see FIG. 3A-B, SDDI package) having at least a System Item and one or more of a Picture Item, an Audio Item and an Auxiliary Item (see FIG. 3A-B and 4, system data and ancillary data; see col. 6, lines 54-67) wherein the or each of the System, Picture, Audio and Auxiliary Items comprises

a Label (see col. 3, lines 60-67; see col. 4, lines 35-42a identification flag) having a predetermined number of bytes (see FIG. 4A; bytes/words) and at least one byte identifying the Item a word count indicating the number of bytes of data of the Item (see FIG. 4A, data count), and the data of the Item (see FIG. 4A-B; data; see col. 6, lines 55 to col. 7, lines 9);

removing the Label of each Item (see FIG. 1, Identification extraction circuit 43; see col. 4, lines 55 to col. 5, lines 22);

inserting a start code (see FIG. 3A-B and 4A-B; SAV) and Item type word (see FIG. 4A, Data code; see col. 5, lines 60 to col. 6, lines 12; see col. 7, lines 19-24); and

inserting an end code (see FIG. 3A-B and 4A-B; EAV; see col. 7, lines 9-15, 40-45; see col. 5, lines 60 to col. 6, lines 12) to thereby produce an SDTI signal (see FIG. 1 and 2A, producing SDI signal; see col. 5, lines 30-46).

Yamashita does not explicitly disclose inserting in place of the label. However, Tappen teaches inserting in place of the label (see FIG. 4 and 7A-B; col. 6, lines 13-19; see col. 39-60; replacing the label). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to

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replace the label, as taught by Tappen in the system of Yamashita, so that it would minimize differences among the different real time label switching operations; see Tappen col. 4, line 50-65.

Regarding Claim 28, a claim which that substantially discloses all the limitations of the respective claim 25. Therefore, it is subjected to the same rejection.

Allowable Subject Matter

16. Claims 27 and 29 are objected to as being dependent upon a rejected base claim and the objections set forth in paragraphs 4,5,8 and 9, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ian N. Moore whose telephone number is 571-272-3085. The examiner can normally be reached on M-F: 9:00 AM - 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau T. Nguyen can be reached on 571-272-3126. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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